

$\psi_3(3842)$

$$I^G(J^{PC}) = 0^-(3^{--})$$

J, P need confirmation.

J^P has not been measured, 3^- is the quark model prediction.

 $\psi_3(3842)$ MASS

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|---|-------------|----------|---|
| $3842.71 \pm 0.16 \pm 0.12$ | AAIJ | 19M LHCb | $pp \rightarrow D\bar{D} + \text{anything}$ |

 $\psi_3(3842)$ WIDTH

| VALUE (MeV) | DOCUMENT ID | TECN | COMMENT |
|--|-------------|----------|---|
| $2.79 \pm 0.51 \pm 0.35$ | AAIJ | 19M LHCb | $pp \rightarrow D\bar{D} + \text{anything}$ |

 $\psi_3(3842)$ DECAY MODES

| Mode | Fraction (Γ_i/Γ) |
|----------------------------|--------------------------------|
| Γ_1 $D^+ D^-$ | seen |
| Γ_2 $D^0 \bar{D}^0$ | seen |

 $\psi_3(3842)$ BRANCHING RATIOS

| $\Gamma(D^+ D^-)/\Gamma_{\text{total}}$ | VALUE | DOCUMENT ID | TECN | COMMENT | Γ_1/Γ |
|---|-------|-------------|----------|---|-------------------|
| seen | | AAIJ | 19M LHCb | $pp \rightarrow D\bar{D} + \text{anything}$ | |

| $\Gamma(D^0 \bar{D}^0)/\Gamma_{\text{total}}$ | VALUE | DOCUMENT ID | TECN | COMMENT | Γ_2/Γ |
|---|-------|-------------|----------|---|-------------------|
| seen | | AAIJ | 19M LHCb | $pp \rightarrow D\bar{D} + \text{anything}$ | |

 $\psi_3(3842)$ REFERENCES

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|------|-----|---------------|-----------------------|----------------|
| AAIJ | 19M | JHEP 1907 035 | R. Aaij <i>et al.</i> | (LHCb Collab.) |
|------|-----|---------------|-----------------------|----------------|